2016 UPPER EAST COAST WATER SUPPLY PLAN UPDATE STATUS













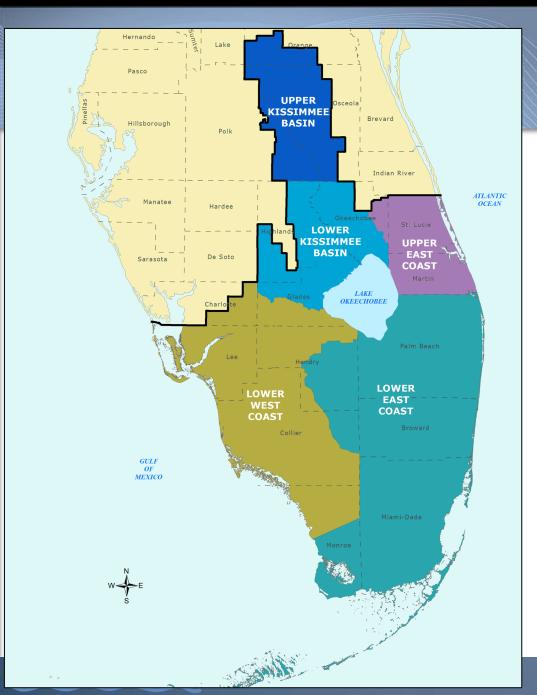
Mark Elsner, P.E.

Administrator

Water Supply Development Section , SFWMD

WRAC Meeting

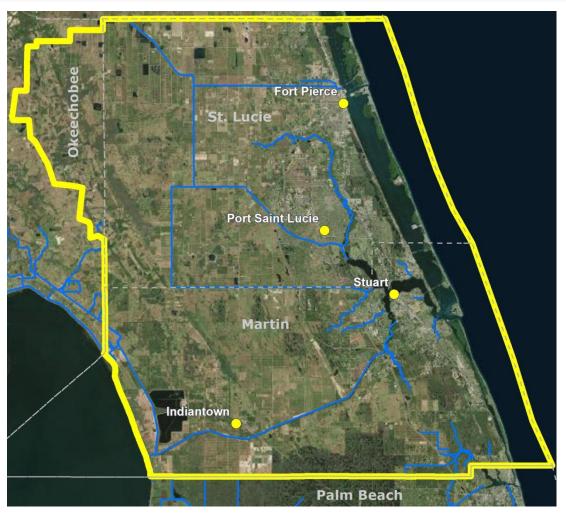




Regional Water Supply Plan Requirements

- 20-year planning period
- Demand estimates and projections
- Resource analyses/issue identification
- Evaluation of water source options
- Water Resource Development
 - Responsibility of Water Management
- Water Supply Development
 - Responsibility of Water Utilities/Users
- Minimum Flows and Levels (MFLs)
 - Prevention or Recovery Strategies

Upper East Coast (UEC) Planning Area



- The geographic area Includes:
 - St. Lucie County
 - Martin County
 - NE Okeechobee County
- Major agricultural industry
- 7 municipalities
- 16 public water supply utilities
- Significant environmental features

Summary of 2011 UEC Plan Issues

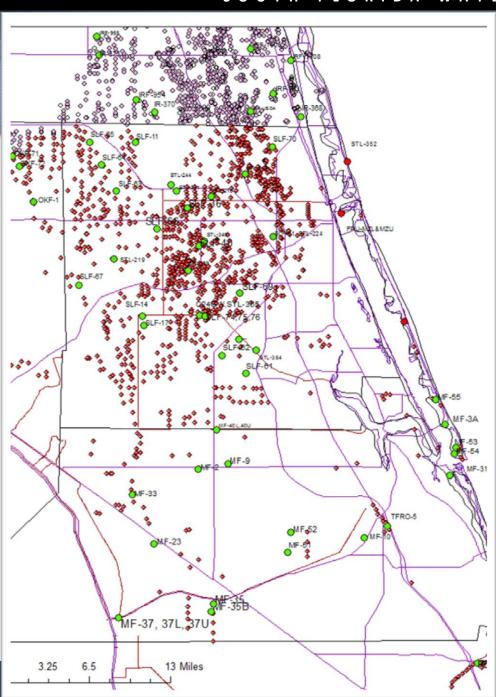
- In many areas, increases in withdrawals from the surficial aquifer system limited
 - Wetlands
 - Salt water intrusion
 - Aquifer protection
- Surface water availability limited
- Fresh water discharges affecting health of coastal resources
 - Salinity fluctuations



Importance of Public Involvement

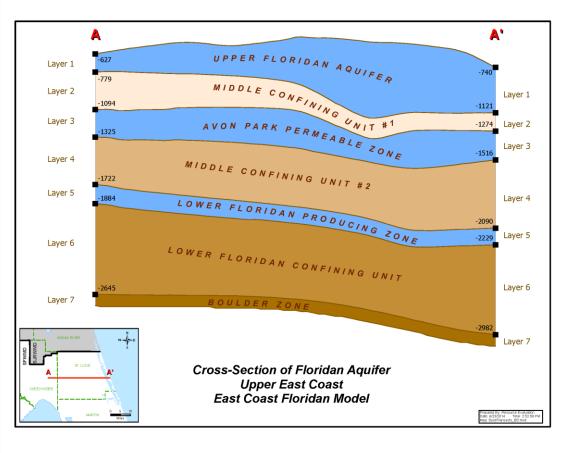
- Active participation to ensure plan reflects needs of planning area
 - Agricultural Interests
 - Public Water Suppliers
 - Environmental Community
 - County Commission/City Council
 - County/City Planning Staff
 - Adjacent Water Management District
- Opportunities for public participation
 - WRAC & WRAC special issue's workshops
 - Governing Board meetings
 - One-on-one meetings
 - Others





Permitted Floridan Aquifer Wells in UEC Planning Area

UEC Floridan Aquifer System Model Analysis



- First application of East Coast Floridan Model (ECFM)
 - Simulates water quality in addition to water levels and flows
- Meetings with stakeholders and adjacent water management district
- Two public meetings
 - Objective and Approach
 - June 26, 2014
 - Assumptions and Results
 - June 3, 2015

UEC FAS Model Analysis Draft Conclusions

Upper Floridan Aquifer (UFA) results

- Continued withdrawals at current rates (2013) in southern Indian River County and northern St. Lucie County will have a combined effect on water levels and water quality
 - Increased withdrawals at projected future rates (2040) will have larger effect on water levels and water quality
- Potential decreases in water levels increases the risk of artesian flow reductions for agricultural users in portions of St. Lucie County
- Remaining areas show little or no change in water quality or water level through the model simulations

Avon Park Permeable Zone (APPZ) results

Water quality degradation will likely continue for Public Water Supply utilities in St. Lucie,
 Martin and N. Palm Beach counties

What's Next?

Ongoing Meetings with stakeholders

June 4 WRAC Presentation

June 11 Governing Board Presentation

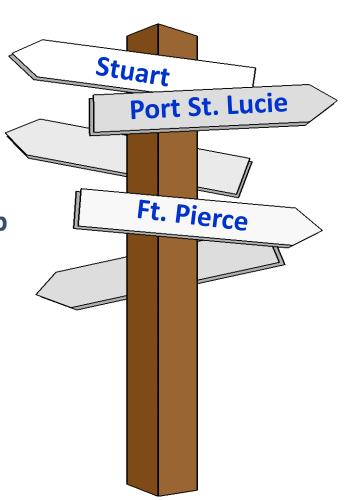
June 25 UEC Plan Update Kick-off Public Workshop

Nov. Distribute Draft Plan

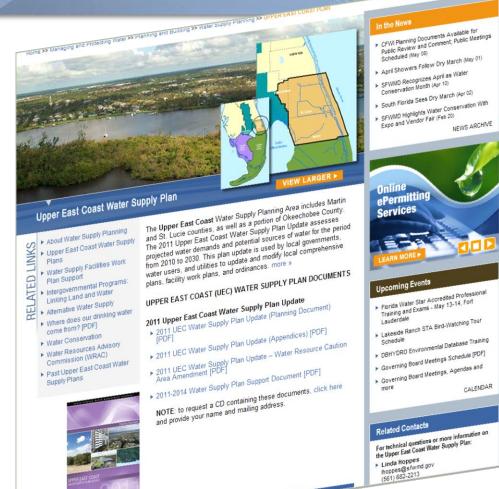
Dec. Public Workshop

Jan. 2016 Draft Plan to Governing Board

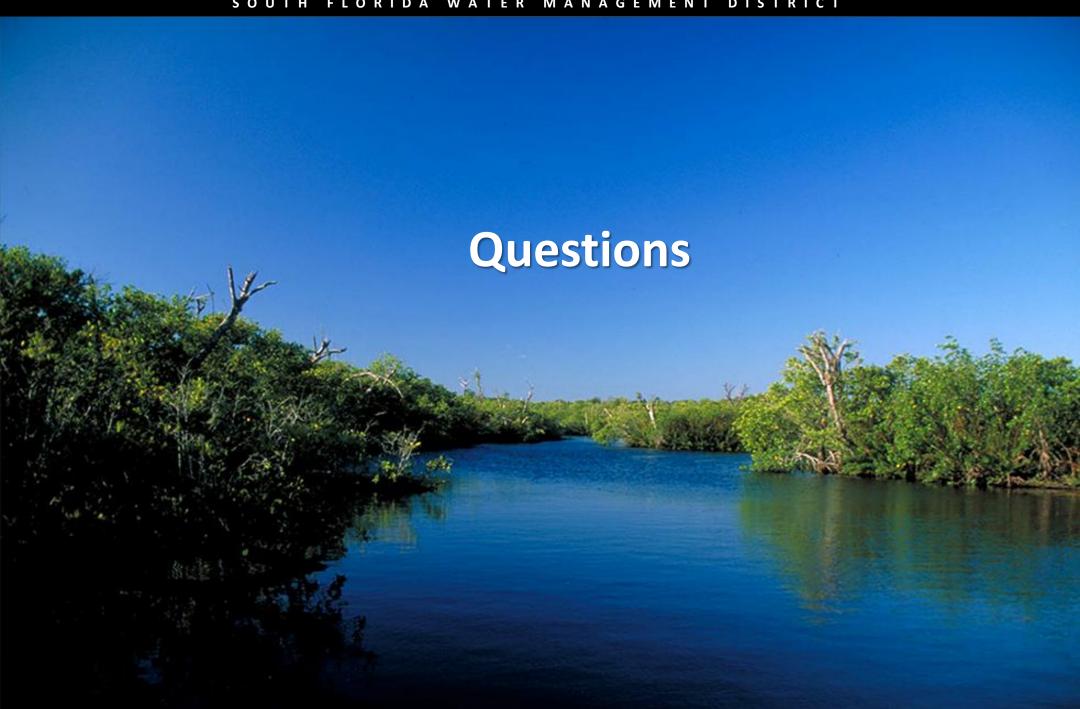
March 2016 Final Plan to Governing Board



Need UEC Water Supply Plan Information?



- Plan information, including modeling and workshops, can be found at: www.sfwmd.gov
 - Then type "Upper East Coast Water Supply Plan" in search box
- Workshop information can be found at:
 - SFWMD Calendar
 - WRAC agenda webpage
- Workshop announcements sent by email



UEC FAS Model AnalysisDraft Recommendations

- Successful long-term management of the Floridan Aquifer System (FAS) for PWS will likely require a combination of:
 - Additional wells with greater spacing between wells
 - Lower capacity wells in the APPZ
 - Continued refinement of wellfield operational plans
- District to work with agricultural industry to:
 - Better understand the use of the FAS for irrigation as it relates to surface water availability
 - Better define water quality tolerances for crops
- Continue District coordination with St. Johns River Water Management District